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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,946	02/25/2004	Alex Stolarz	8130.0096	9516

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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

PATTERSON, MARC A

ART UNIT PAPER NUMBER

1772

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/784,946

Applicant(s)

STOLARZ ET AL.

Examiner

Marc A. Patterson

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-42, 51, 52, 54-58, 60-62, 64-71 and 74-76 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-42, 51, 52, 54-58, 60-62, 64-71 and 74-76 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/14/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's statement of the election with traverse of Claims 26 – 71 and 74 – 76 in the reply filed on July 6, 2006 is acknowledged. The traversal is on the ground(s) that the claims of Group I contain subject matter whose proper search would overlap with the search of Group. This is not found persuasive because Group I and Group II are directed to a product and method, and therefore having different classifications.

The requirement is still deemed proper and is therefore made FINAL.

WITHDRAWN REJECTIONS

2. The 35 U.S.C. 112 second paragraph rejections of Claims 27, 30 – 32, 56 – 57, 60 and 74 – 75, of record on page 5 of the previous Action, are withdrawn.

NEW REJECTIONS

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 26 – 39, 41 – 42, 51 – 52, 54 – 58, 60 – 62, 64 – 66, 68 – 71, and 74 – 76 are rejected under 35 U.S.C. 102(b) as being anticipated by Flepp et al (U.S. Patent No. 6,555,243).

With regard to Claims 26 – 29, 33 – 42, 51 – 52, 54 – 58, 60 – 62, 64 – 71 and 74, Flepp et al. discloses a thermoplastic multilayer composite (column 1, lines 7 – 8) in the form of a hollow body (column 7, lines 65 – 67) with one intermediate layer formed on the basis of ethylene/vinyl alcohol copolymer (column 5, lines 19 – 21) and at least one inner and outer layer described by Flepp et al as an adhesive layer immediately adjacent to said intermediate layer (column 6, lines 25 – 30); the inner and outer layers consist of a polyamide molding composition mixture of polyamide 6, polyamide 12, and a compatibilizer (column 5, lines 32-33); the amount of polyamides in the inner and outer layers is between 25 – 80% by weight of polyamide 6 (column 5, lines 60 – 63), which is within the range of 40 – 60% (2:3 to 3:2) and 40 – 50% (2:3 to 1:1) by weight of polyamide 6 in Claims 33 and 34 of the instant invention, respectively; Flepp et al. discloses that the compatibilizer in the mixture is preferably up to 30% by weight (30 parts in weight; col. 6, lines 61-63), preferably 5 – 15% (5 to 15 parts in weight) by weight (column 6, Lines 61-63); Flepp et al. also disclose the use of rubbers for impact strength modifiers in the polyamide molding compositions (column 6, lines 33-37); the acid-modified ethylene/olefins copolymers used as an impact strength modifier, can also be used as a compatibilizer(column 6, lines 50 – 56); the impact modifiers have elastomer fractions (column 6, lines 40-43); the multilayer composite has at least one intermediate layer comprising ethylene/vinyl alcohol copolymer (column 5, lines 19 – 21); also disclosed by reference is the use of copolyamide 6/12 admixed with the ethylene/vinyl alcohol copolymer to decrease stress cracking which has the advantage of maintaining the barrier effect(column 3, lines 58 – 63); the inner layer (column 6, line 14) or additional inner layers (column 6, lines 17 – 18) are disclosed as having antistatic agents added so that the inner layer becomes electrically conductive (column

6, lines 13 – 17); additional additives such as pigments (column 6, line 67), stabilizers (column 7, line 1), reinforcement agents (column 7, line 1), and flame retardants (column 7, line 1) can also be added to the inner or additional inner layer; Flepp et al also discloses the addition of layered silicates (col. 7, line 10) to the ethylene/vinyl alcohol copolymer (column 7, line 18 – 20) to increase strength, strain at break, and other mechanical properties (column 7, lines 12-14); the thermoplastic multilayer composite is in the shape of tubing (column 1, line 14) such as for use in fuel lines (column 1, line 9) and fuel tank inlets (filler neck; column 7, Line 62).

With regard to Claims 30 – 32, the applicant is introducing process limitations to the product claim, hence, the process claim is given little patentable weight due to the fact that the patentability of a product does not depend on its method of production.

With regard to Claims 75 and 76, the applicant is introducing the intended use of the thermoplastic multilayer composite; the limitations directed to intended use as a fuel line and filler neck for a fuel tank are given little patentable weight. It is noted that Flepp et al discloses a fuel line (column 7, lines 62), and therefore inherently discloses a filler neck for a fuel tank.

Claim Rejections - 35 USC § 103

5. Claims 40 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flepp et al. (U.S. Patent No. 6,555,243).

Flepp et al disclose a polyamide comprising a compatibilizer as stated above. Flepp et al. discloses that the compatibilizer is in a range of 0-30% by weight (0-30 parts by weight) (column 6, lines 61-63). However, Flepp et al. fail to teach the entire claimed range, particularly the 30 – 35% by weight (30 – 35 parts by weight) of the instant invention. However, one of ordinary skill

in the art at the time the invention was made would have recognized the advantage of varying the amount of the compatibilizer in the mixture to 35 parts by weight would be optimization through routine experimentation as taught by Flepp et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the concentration of the mixture of Flepp et al since the claimed range is overlapping.

ANSWERS TO APPLICANT'S ARGUMENTS

6. Applicant's arguments regarding the 35 U.S.C. 102(b) rejection of Claims 26 – 39, 41 – 42, 51 – 52, 54 – 58, 60 – 62, 64 – 66, 68 – 71, and 74 – 76 as being anticipated by Flepp et al (U.S. Patent No. 6,555,243) and 35 U.S.C. 103(a) rejection of Claims 40 and 67 as being unpatentable over Flepp et al. (U.S. Patent No. 6,555,243), of record in the previous Action, have been carefully considered but have not been found to be persuasive for the reasons set forth below.

Applicant argues, on page 17 of the remarks dated July 6, 2006, that the adhesion promoting layers disclosed by Flepp et al are not inner or outer layers.

However, because the layers are layers of a tube, and therefore have an inner and outer position relative to the center of the tube, the adhesion promoting layers are inner and outer layers; furthermore as stated above, the inner and outer layers are immediately adjacent to the intermediate layer, and comprise blend of polyamide homopolymers and compatibilizer.

Applicant also argues, on page 18, that Flepp et al comprise no compatibilizer in a layer that is facing an exterior of the thermoplastic composite.

However, compatibilizer in a layer that is facing an exterior of the thermoplastic composite is not claimed, and it is not clear that the specification provides support for the limitation. Furthermore, the adhesion promoting layers disclosed by Flepp et al are layers facing an exterior of the thermoplastic composite, although they are not the outermost or innermost layers of the composite.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497. The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marc Patterson 9/18/06
Marc A. Patterson, PhD.
Primary Examiner
Art Unit 1772